SCHEDULE-B

***Name of the Work*: Tender for the work of replacing 200/230mm dia SW pipeline by 300mm dia RCC Np3 pipeline at Sonnappa layout hennur village, HBR Layout coming under HBR service station of AEE E2-1 sub division.**

Sl.No	Particulars	Unit	Total quantity	
1	Dismantling of Flexible pavements and disposal of dismantled materials and stacking serviceable and unserviceable materials separately, By Mechanical Means Bituminous course	m^3	85.10	
2	Earth work excavation for pipeline trenches in all kinds of soils by mechanical means above 600 mm trench width as per drawing and technical specifications, including setting out, construction of shoring, strutting, barricading, caution lights, bracing, using sight rails & boning rods at every 100 mm wherever necessary as directed, removal of stumps and other deleterious matter, dressing of sides and levelling the bottom of trench to the extent required , utilising the available excavated earth locally for the work etc., and all other appurtenances complete in the following strata. All kinds of soil depth upto 1.5m ,300mm dia RCC Np3.	m^3	545.04	
2a.	Depth exceeding 1.5 m, but not exceeding 3 m ,300mm dia RCC Np3.	m^3	217.84	
3	Supplying S&S RCC SPUN / VIBRATED CAST PIPES (REINFORCED) pipes NP-3 Class conforming to IS:458-1988 with latest amendments using ordinary portland cement, for sanitary works and conveying to work site, rolling and lowering into trenches, laying true to line and level including loading and unloading at both destinations and jointing of pipes and specials, perfect linking of joints with jack to correct position including cost of jointing materials, i.e, rubber rings conforming to IS: 5382 for S&S RCC pipes, with all leads and lifts as directed and giving necessary hydraulic test as per ISS to the required pressure and commissioning etc. complete. (Contractor will make his own arrangements for procuring water for testing). Before the execution of the work, the contractor shall carry out the survey. 300mm dia RCC Np3.	m	490.40	
4	Refilling available earth around trenches/pipelines, cables in layers not exceeding 20 cms in depth, compacting each deposited layer by ramming after watering with a lead upto 50 m, and lift upto 1.5 m. Including cost of all labour complete as per specifications	m^3	788.06	
5	Providing and constructing “WIRE CUT BRICK MACHINEHOLE CHAMBERS” using Portland/Pozzolana cement, conical in shape at top, with CC 1:3:6 foundation using 40mm and down size graded metal of approved quality and with an offset of 0.15M alround the chamber. Construct Brick masonry in CM 1:4, 340 mm thick, with wirecut bricks of approved quality, plaster inside and out side with CM 1:3, 12mm thick, except for the conical surface outside where the plaster thickness shall be 20mm. Slope inside to be 1:6 in the concrete towards central drain and finished smooth. Fixing of pipes in CC 1:2:4 with graded metal of 20mm and down size. Supplying and fixing SFRC Machinehole frame and cover (Heavy Duty) conforming to IS:12592 with latest amendment, in CC 1:2:4. Supplying and fixing footsteps made of 12mm dia. steel bars (Fe-500) with 3mm thick plastic encapsulation (IS-10910). The footsteps shall be fixed 30cms apart and on CC block embeded to masonry wall. The whole works include watering, curing, barricading, danger lighting, pouring tar over MH frame and cover, cost of tar, shoring, strutting, de watering, engraving Machinehole number with flow direction on the inner conical surface etc. as per the drawing etc. as per technical specifications and for the following diameters and depth etc. for 1.2mm diaCirc. B M.H: 1.2m dia			
5a	1.10 mt depth manhole NMH 19	No	1	

5b	1.20 mt depth manhole NMH 12, 14	No	2	
5c	1.40 mt depth manhole NMH 15	No	1	
5d	1.50 mt depth manhole NMH 16	No	1	
5e	1.60 mt depth manhole NMH 13, 17	No	2	
5f	1.70 mt depth manhole NMH 18	No	1	
5g	2.00 mt depth manhole NMH 11	No	1	
5h	2.20 mt depth manhole NMH 2, 5	No	2	
5i	2.60 mt depth manhole NMH 3, 9	No	2	
5j	2.30 mt depth manhole NMH 10	No	1	
5k	2.40 mt depth manhole NMH 4 , 7	No	2	
5l	2.50 mt depth manhole NMH 8	No	1	
6	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density.	m^3	66.20	
7	Providing and applying primer coat with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.70 kg/m2 using mechanical means	m^2	441.36	
8	Providing and laying Bituminous Macadam with 120 tph capacity hot mix plant batch type using crushed aggregates of specified grading premixed with bituminous binder VG-30 @ 3.3% by weight of mix, transported to site, laid over a previously prepared surface with mechanical paver finisher to the required grade, level and alignment and rolled as per clauses 501.6 and 501.7 to achieve the desired compaction	m^3	44.14	
9	Removal of Unserviceable Soil with Disposal upto a suitable distance as directed by the Engineer in charge of work	m^3	59.91	
10	Providing and installing at site of work P.V.C. pipes including cost of pipes and specials and labour, including lowering into trenches, laying true to line, level and perfect linking at joints leak proof including jointing of approved type with all labour charges and all lift charges, handling charges including encasing the pipe around to a depth not less than 15 cms with gravel or selected earth available from the excavation etc.			
	110mm(weight of pipe -1.315 kg)	m	41	
11	Supply and delivery at site special moulded variety PVC bend as per IS 7834/ 1987 and fabricated as per IG124/ 1984 with ISI mark with its latest amendments110 mm dia PVC BEND (	Each	41	
12	Supply and delivery at site special moulded variety PVC reducer as per IS 7834/ 1987 and fabricated as per IG124/ 1984 with ISI mark with its latest amendments110 mm dia PVC REDUCER (	Each	41	
11	Dewatering the sewage / storm water by using reqired HP submersible pump for the diversion of storm / sewage during the execution of work. Considering for one Pump			
	10 Hp	Hr	10	

Executive Engineer

Water Supply & Sanitary division (East)-2,
BWSSB,HRBR 1st Block
Kalyannagar,
Bangalore-560043